

THE  
NATIONAL GEOGRAPHIC  
MAGAZINE

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The list of contributors to the NATIONAL GEOGRAPHIC MAGAZINE includes nearly every United States citizen whose name has become identified with Arctic exploration, the Bering Sea controversy, the Alaska and Venezuela boundary disputes, or the new commercial and political questions arising from the acquisition of the Philippines.

The following articles will appear in the Magazine within the next few months:

"The Growth of Germany," by Professor J. L. Ford of Howard University.

"The Dikes of Holland," by Gerard H. Mathews, U. S. Geological Survey.

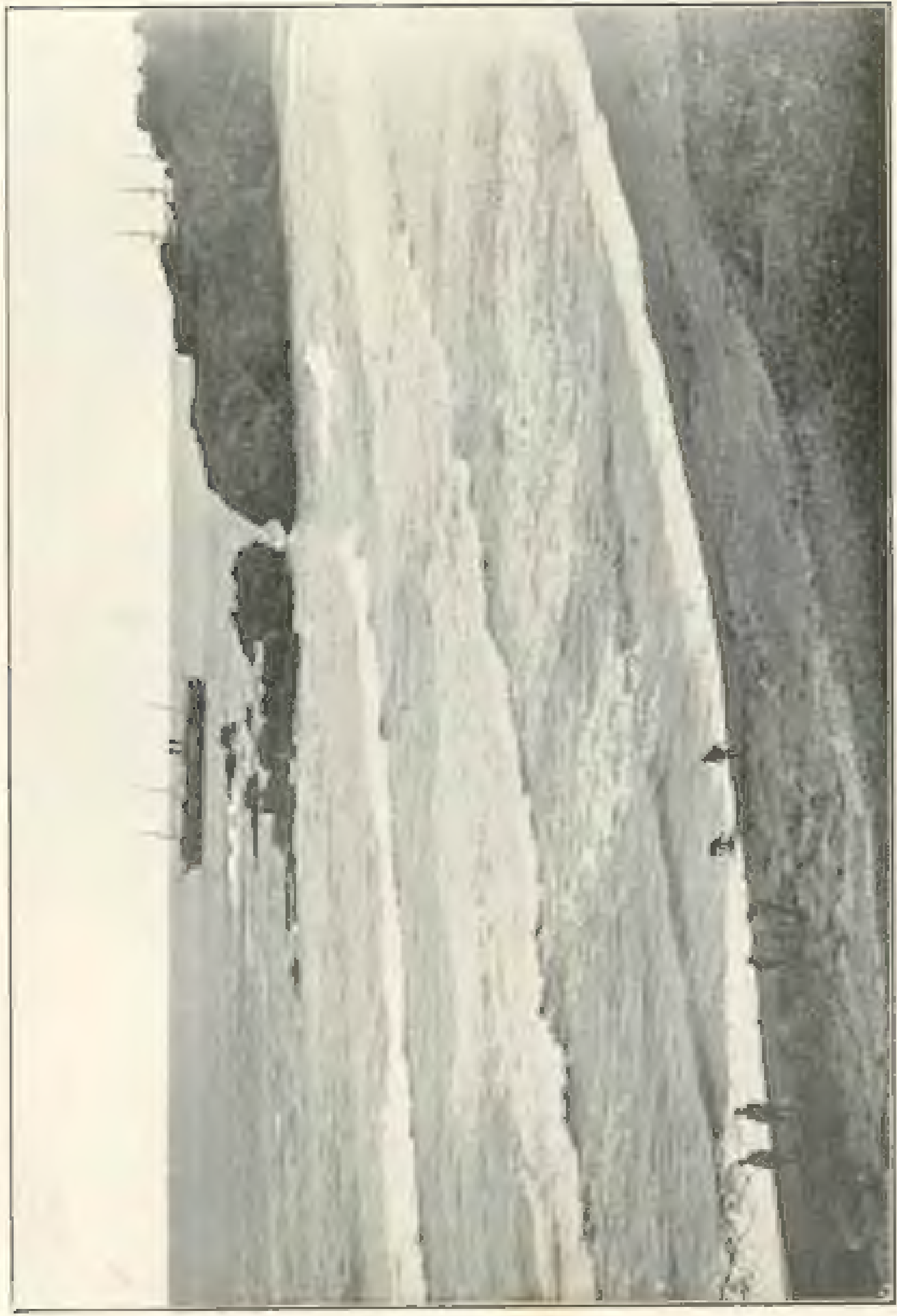
"The Annihilation of the West," by F. H. Newell, Hydrographer, U. S. Geological Survey.

"The Growth of England," by Dr Edwin D. Mead, Editor of the *New England Register*.

"The Native Tribes of Patagonia," by Mr J. B. Hatcher of the Carnegie Museum, Pittsburgh, Pennsylvania.

"Explorations on the Yangtze-Kiang, China," by Mr Wm. Barclay Parsons, C. E., surveyor of the railway route through the Yangtze-Kiang Valley.





THE HARBOR OF MOLLEND - 1800

# THE NATIONAL GEOGRAPHIC MAGAZINE

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## THE ROAD TO BOLIVIA

By WILLIAM E. CURTIS

It takes seven days to make the voyage from New York to the Isthmus; three days from New Orleans, and two from Tampa; but the latter routes are impracticable on account of the quarantine regulations. There is always more or less fever at the Isthmus. It is difficult to keep it away, because Colon and Panama are filled with human driftwood and are asylums for refugees from plagues, politics, and criminal courts. The last yellow fever was brought to Panama, erroneously enough, by seven friars from the Philippine Islands. They are all dead but one. Panama is the home of political exiles, unsuccessful revolutionists, and banished presidents of the Central and South American republics. It has a fine hotel, a number of handsome residences, and no end of ruins, which have been accumulating since the time when the governor of this first colony on the American Continent began a history that has no parallel for conspiracy and intrigue on the American Continent.

Usually the voyage from New York is delightful. People always expect a little weather off Cape Hatteras, but when you pass that unlucky coast and cross the Gulf Stream you put on lighter clothing and rejoice in the trade winds which temper the heat of the tropics. The days and nights are of equal length. The sunsets are as gorgeous as you see on the Mediterranean, and there is no twilight. The sun rises promptly at the time appointed in the almanac, and when his day's work is done he drops below the horizon as a tired sailor tumbles into his bunk.

As an Irishman would say, the first land you see is a lighthouse, striped like a stick of candy, that marks Wallings Island, where Columbus stumbled upon a new world. There is a little settlement of negroes and a white magistrate to represent the sovereignty of Queen

Victoria. After leaving Walling's the steamer trends its way through the Bahama Archipelago, giving the passengers a panorama of coral islands, where the sponge-fishers live, groves of coconut trees, and lonely lighthouses that guide the ship to Colon, which from the deck of a steamer is one of the prettiest towns on the coast, but when you get ashore is a disappointment and a delusion. The harbor is enclosed with beautiful hills, whose bright-green foliage never fades, and groups of palms nod lazily to each other as they admire the reflection of their own beauty in the water. The palm is the psalmist of plants. It is the most graceful tree that grows, but you can't help despising it for being so vain and conceited.

The railroad company occupies one end of the town with shops and boarding-houses, and at the other end is a group of ornate and elaborate gingerbread villas erected for the comfort of the large and luxurious staff of the canal company. They had clubs, billiard rooms, libraries, hospitals, and everything that a colony of cultured gentlemen could desire except churches. The French christened the canal company *Christo Colombo*, but the Americans call it Colon. One of the most beautiful and costly and at the same time inappropriate statues to the great discoverer overlooks the entrance to the canal. It was erected by the ex-Empress Eugénie, and represents Columbus in the garb of a student, with a benign expression on his countenance and his hands resting on the tresses of a crouching Indian girl.

A surprising amount of work has been done by the Panama Canal Company, contrary to an almost universal misconception that exists among the American people. De Lesseps dug two ditches, each about 18 miles in length, from Colon and Panama toward the center of the Isthmus, which are now partially filled with debris. The new company has been working in the interior, cutting through the summit of the continental divide, which here rises only 554 feet above the sea, and, with one exception, is the lowest point of land between Bering Sea and the Straits of Magellan. The great obstacle that stands in the way of the Panama Canal is the Chagres River, which receives the drainage of a large area and is perhaps the most depraved and unreliable stream in existence. There are two seasons, the wet and the dry. For five months it rains a torrent every day, a rainfall of about four feet a month. The remainder of the year there is no rain at all. Thus for five months the Chagres River is a Niagara, and for seven months a shallow, stagnant stream. The problem is to regulate the rainfall so that it will not wash the canal away in the wet season and leave the upper levels without water in the dry.





—MINING PEOPLE WORKING IN PANAMA—

Panama is one of the oldest and quaintest towns in America. Santo Domingo antedates it a few years, but it was the first settlement on *tierra firme*, and the ruins of the original city still lie on the shore of the bay four miles south as they were left by Morgan, the famous buccaneer, who burned and blew up 7,000 houses. The present city dates back to 1673. In 1849 it was the principal station on the route to California. In 1879 the Frenchmen came with their millions, and everybody had money to burn. Then, after a hysterical period, Panama settled down to the sleepy existence which it still retains. The harbor is beautiful, and a group of islands lying about two miles from the city is the headquarters of several steamship companies which furnish transportation facilities for the west coast of America.

The voyage from Panama south is one of the most fascinating and comfortable that the salt water affords. You are always sure of fine weather, fine ships, and a good sea. It never rains, it never blows, and the swell is not heavy enough to make ordinary people seasick. From Guayaquil to Valparaiso the passengers are almost always in

sight of the Andes, whose feet are buried in the desert lands, whose breasts are wrapped in the foamy clouds, and whose peaks are crowned with spotless snow. The spectacle of the Chimborazo rising like a king among an army of Titans is surpassed by few mountain views, and the scenery during the entire distance is always picturesque.

The temperature south of Panama is much cooler than north of the Isthmus, for the heat is tempered by the Humboldt Current, a cold stream that comes up from the Antarctic zone to cool the atmosphere of the west coast, just as the Gulf Stream brings the warm waters of the tropics to moderate the climate of Europe and North America; for you know that if it were not for the Gulf Stream everybody in New England would be living like the Eskimo and potatoes would not grow in Ireland.

We crossed the equator at six o'clock, Sunday, July 2, 1899. The thermometer stood at seventy-six degrees in the chart-room, on the shady side of the ship, and at seventy-eight degrees in the companion-way leading to the dining-room. On the Fourth of July, three degrees south of the equator, it was seventy-six at noon and eighty-one at four o'clock.

From the deck of the steamer in the evening, Guayaquil looks like a little Paris. It lies along the bank of the River Guayas, and the main street, called El Malecon, stretches for two miles or more from a shipyard to a fortress-crowned hill with two decrepit old guns, which are supposed to protect the harbor. El Malecon appears to be lined with long blocks of beautiful marble and stone, and in the evening is brilliantly illuminated. Here appears a row of palaces, then a group of clubs, and beyond a series of blazing ball-rooms. In the morning from shipboard the illusion is not dispelled, and the view is quite as imposing. The architecture is pure and graceful, much of the Moorish order, and the rest on more delicate lines—long arcades like those on the *Rue de Rivoli* or the *Palais Royal* of Paris, and above them balconies sheltered by blinds and awnings of gay canvas have an oriental look. A little railway, with tiny cars drawn by diminutive locomotives, carries heavy loads of merchandise, cocoa, and sugar between the docks and the warehouses.

An interesting kind of craft on Guayas River was called *caballitos*, or "little horses," which consists of bundles of rushes and reeds lashed together and forming a narrow float or raft that tapers off at one end like a gondola. They are as difficult to handle as a canoe, and are used chiefly for fishing. The *caballitos* look very frail and



dangerous when you see them in the water, but it is impossible to sink them.

When you leave the Guayas River to go southward you strike the "Zona Seca," the desert coast, as soon as you pass the boundary of Peru. The steamer follows the shore as closely as safety will allow. The surf has pounded it until the soft places have yielded and its present outlines resemble the wind-carved cliffs on the American desert, and scattered along are many islands gray with guano, dropped by the millions of water birds that make their home along the way-worn and forbidding shore. There are a few indifferent harbors, but most of the towns lie upon the unprotected beach, and communication between the steamer and the shore is carried on in large launches, made so buoyant that they ride safely through the surf.

Like the arid lands of Arizona and southern California, the desert coast of Peru is rich in vegetable life wherever it can be moistened. About once in a generation a shower escapes



A PARALLEL

from the mountains, and the hitherto lifeless earth is immediately illuminated with fruits and flowers whose germs have lain dormant from remote cycles. In 1892 there fell a series of unprecedented rains. The desert was alive with plants and blossoms where nothing but lifeless sand had been before, and where the seeds came from is a question no one has ever been able to answer.

The steamer stops at every town for an hour or two, long enough to take on and discharge cargo, and the passengers can go ashore and enjoy diversions from the voyage, which are always interesting. We saw funerals and weddings and busy markets and many queer things unique to this locality.



A SCENE ALONG

Back of the port of Paucamayo, across the desert and the first mountain range, is the town of Caxamarcu, where the traveler may still see the remains of the palace in which Pizarro and his legions strangled Atahualpa, the last of the Incas, and butchered the members of his court after he had filled his prison with gold; and farther down the



car horses.

The west coast of South America has been called a peninsula of a nearly straight for 1,500 miles. The town of Mollendo, the terminus of the railway that connects Lima and the interior of Peru, was once thought to be built upon a rock that extends from the coast.

By breaking the coast into two parts, the Pacific and the Atlantic, we can see that the coast is not a straight line. As our captain suggested, what else can you expect when you have nothing else but Australia for a breakwater.

Although Mollendo is the second largest port of Peru, the water is so shallow that people cannot always land there. Sometimes passengers on the steamers have to disembark at the next port and

to find that the passengers who are lucky enough to remain on board are then enjoying a most amusing spectacle.

The water used by the people of Mollendo is brought 25 miles

from the coast.

For the first ten miles out of Mollendo the railway runs along the coast. It passes first through a region of rocks and sand upheaved by some great cataclysm, and continues to wind like a snake in and out of the irregularities of the coast. There are double curves and serpentine and horse-shoe curves, and at places you can see the tops of our hotels, one above the other, on the summit of a cliff. There is an average rise of 800 feet between stations thereafter.

entry at the train, as if persons were of its composition.

At every station there is a long wait, and the passengers are left to one end of the locomotion or work on the spot. As at last

we are at 2,500 feet (4,000 m), one of the highest peaks in South America, which measures 12,000 feet, and Misti, a still more volcanic and that rises from the desert, so that it is a truly noble

At frequent intervals crossed have been started where men have

while crossing the pampas, all of them were once buried in the

raised and along about the middle of the eruption.

rising to a height of sometimes twelve and sometimes twenty feet at the center of the area, and is filled with perfect symmetry. The arms of

now move continuously, making an average distance of about 10 feet a month, and each now keeps its own sand and in a mysterious manner they never mix, nor do they increase in number. Although

the number of mountains is no greater now than it was twenty-five or thirty years ago.

The valley contains a vast number of people, and the fort city is at once by an iron road, that maintains the place for granite of the scenery. Irrigating waters creep down the river, and empty their contents over the slopes. Farmhouses are built on the hills, without the river and are filled with pools of water. The best of the river is over which a catwalk has been placed





top of the hill, the wind whistled over the trees and  
the grass. The wind was not strong, but it was  
enough to make the leaves rustle and the grass  
whisper. The wind was not strong, but it was  
enough to make the leaves rustle and the grass  
whisper.

[illegible][illegible]

The supposition that the two sets of variables would be independent has been put forward since we have been told that, in the field, there is use of a variable or part of a variable. Therefore the two groups of variables are not independent. The presence of a variable does not mean all they have to hang off, for not a person can do more lightly and the number of their variables is not even finite. It is to devote to the variable representation of a variety of variables, and the degree among some of the onest, at least at some of the times. The variables are then not the same as the variables and the variables are, in other words, are, which upon some some of the variables, but the fact that the variables are not some of the variables is a question of the variables and the variables are not.

After it is the young of Señor Don Edmundo Lopez de Komand, the second civil an we have here, president of Peru. A civil engineer by profession, he takes little interest in politics which is a surprising characteristic in a country where political science has absorbed the attention of the people to a degree that has even seriously detracted from their normal pursuits. But we must recognize that Komand will not resist but he will not seek the presidency—nor for absolutely any other political activity of a South American type.

condition of  $\Gamma$  is met. It is noted that the  $\Gamma$  is a subset of  $\mathcal{S}$ , the set of

ology, a conservator of Harvard University. Observers are engaged in making a map of the heavens of the southern hemisphere, the elevation and the purity of the atmosphere enabling them to make

striking use on the top of the volcano Misti.

Passenger trains leave Arequipa for Lake Titicaca on Thursdays every day. The track climbs around the base of the volcano Misti. The mountains are bare and seem to be composed of a soft

calc- like cheese. It was very convenient and useful for grazing purposes, and on the mountain sides are great dry rock walls, were everywhere cut for this purpose whose walls are as regular and as smooth as if they had been done with a carving-knife. At Arequipa

on, and potatoes and melons and ordinary vegetables and fruits grow as they do in La forma.

We cross the grand divide at Cerro Alto (The High Crest), a

point where the railway and La Paz feet leave the sea. There are mining settlements in Peru at a greater elevation, but for many years this was the highest road in the world at which steam was used for motive power. The highest elevation ever reached by a railway's heavy wheel on the Oraya road of Peru, 15,600 feet. The mountains are most extraordinary, it being the end of a division, and the landscape of the steep slopes was watch the rocks upon the peaks that surround it.

At Cerro Alto water freezes every night if the frost, and the thermometer often falls to 0, 5, and 10 degrees below zero. There are no farmers here for anything but wheat, corn, barley, and potatoes.

At noon the sun is intensely hot, because of the elevation and rarity of the atmosphere and before the flesh of those who are not accustomed to it. There is a difference of 90 degrees between the

degrees in the temperature of the sands and the sunshine. What a

day we were working in their shirt-sleeves.

As the kids are often out on their own, parents for weeks at a time would not expect or anything to eat except nuts and every drop of dried meat and every berry, which are the only food in winter, of course at our points.

about 100 feet. At the 14th hole  
down the road I saw a large  
pool of water drop into the lake  
and the huge logs of the drift  
wood, were 14-20 feet in length  
and a group of large lakes of very cold  
ice water with ice in it or on it,  
and some ice the thickness of a large  
man and covered it some 100 feet  
long and some 10 feet wide of the lake  
and some of the ice was on the  
edges of the lake every night the  
ice was on it.

A common question asked is that they keep it level all the time, regardless of the price. But I've seen this a number of times. It makes no sense.

their depth which, however, in the center is unknown; and this adds to the awe and mystery with which they are regarded by the Indians. There are no boats upon the lakes except a few small barges or rafts made of bundles of straw which keep very close to the shore for fear of being drawn down by the whirls and to exist in the center. There is some foundation for our fear for only two or three years ago a barge containing five men disappeared in the darkness and was never heard of again.



In the 1940s, pools near the sector of Lake Popo, which were used by a group of Lake Tzuc's inhabitants of men have not the same level of protection and safety as the Lake Tzuc. They are not protected by any kind of fence and do not have any guard. For the protection of the zone, the group members of Lake Tzuc are provided a set of barbed wire in Lake Popo. This set of barbed wire is to be used in the future.

There is supposed to be no longer a contact from all of these who also play on the "Articles which have been thrown in" last winter, and afterward he is picked up on the seacoast, that Africa and the sea heard in that form they are the only few of circumstances made a study of delay which is not a glow on his coast, and are found in great places accompanying the other places.

After crossing the great divide of the Sierra Nevada, you enter the great basin and find it a between two two ranges of the Andes and is known to be not less than 1000 miles in length and from 200 to 300 miles in width. It forms the great basin was the most fertile and productive part of the region in the center of the great American. On either side

of that one area, and the ranges of snow covered peaks can be seen to the east and to the west from every car mile, a vast chain of mountains, no gas, no phone ranges, dark, barren, and lifeless.

And no part of the world does nature assume more astonishing forms or offer more striking contrasts. The deserts and the mountains are as bare and repulsive as the Sahara. The valleys are as full of fertile, verdant vegetation as Italy. Eternal snow or ice is met by a life with overhanging rivers, and the perfume of flowers and trees is as fragrant as the repulsive wastes of an island of rock. If ever these conditions were the basis of a government, the best known to the world, in which the equal rights of every human being were recognized, a community that adopted the ideas of human socialism, that would open a door whose light and attributes were unknown just a short time of days ago. Men would be slaves to the society that would be organized, no man as the slave of men and things, no greatest blessing of any man, no man, give it the chief place in a new government.

The railway through the mountains of Cordoba said to be the best in South America. It has a fine track, and runs smoothly, and very fast, to the United States. Most of the freight is carried by the business class, copper and gold ore. A considerable quantity of wool is exported, and a few hides. The outward freight is merely a fee for taking in the ore, and supplies for the mines. The greater part of



It appears to have come from Germany and it is remarkable how

there are flowers on all the fingers, and better than on the lower limbs, and as the train approaches the center of the basin

we come to Jolmen, where the railroad divides, one branch running

the capital of the Inca empire

Five hundred years ago Cuzco was the most important city in America, with a population of 200,000 or more and a wealth that few countries of Latin America have ever surpassed. It is now a dismal, dirty, half-deserted habitation of from 20,000 to 30,000 people

the property and conduct what little business is done there. Cuzco was the residence of a long line of kings, who lived in splendid circumstances surrounded by courts of enormous riches, and remark

and even that could be seen

Each successive Inca built a new palace at Cuzco, and several colossal temples and convents that rivaled the royal residences in

recesses of his former splendour and power. The streets of grace are

There are many monasteries, which are marvels of architecture and beauty. The courts and cloisters of the convents are admirable in

and monasteries of Europe. In La Mercedito the remains of Juan and Gonzalo Pizarro, the brothers of the conqueror of Peru and

world, but now are the victims of time and negligence

*To be published in the next number*



## THE COLONIAL EXPANSION OF FRANCE

By Professor JEAN C. BIAIS

*of Cornell College*

It was not till the end of the fifteenth and the beginning of the sixteenth century that France attained anything nearly so large in her present extent as the European continent and began her really extraordinary expansion. The early centuries produced French leaders upon the Costa Coast and the Bay of Canada, in the fourteenth century, and the sixteenth century saw the first of the famous explorers, such as Jean de Verrazani, who discovered what was to come. But the beginning of real expansion came upon the west coast of France. Basque and Breton fishermen went early to the western coast, to Iceland and Labrador. It is probable that they visited Newfound-land before Canada for they fished there at an earlier period than the English. Later following the example of the

in the exploration of the new world. Verazani in the service of France visited the Atlantic Coast of North America in 1497, and seven years later Jacques Cartier, ascending the St. Lawrence opened a limitless prospect of expansion for France in the new world.

### NOTES AND ILLUSTRATIONS TO THE FIRST FRENCH COLONIES

religious considerations, religious and over secular ones in many ventures made in this time. In view of the religious education of Frenchmen, and their loyalty wanted to establish on the American

refuge for French religious dissenters. Sixty-two years before the founding of the Massachusetts he endeavored to found a colony in South America, and six years later one in Florida. The first failed because

and by an ideal location. Its Protestant character

It is well to remember that though the French are Latin by their blood, and partly Celtic-Germanic in blood. They have an abnor-

or mission. They do not easily exchange themselves from security. So there is not, least of all, the love of an entire for one. That to a Frenchman naturally seems outward expression of the mission. At the same time, the desire to work is

most intense. Thus France has more land of a great nature than all the other European countries taken together. One cannot

believe of their action, which at times also is the great force of France.

Though all other countries were at work, it was particularly

Montreal from the first was a center of missionary and political action of the French. The missionaries and the

latter for the satisfaction of a restless spirit, they won a new empire for France. The latest possible mission presented to the world. The idea, to use the words of a population into a great Christian civilization, was in perfect keeping with Henry IV's dream of universal peace.

Meanwhile, under Richelieu and Colbert, expansion was taking place in other directions, reaching Canada, some islands of the West Indies, and Seychelles, Madagascar, and the Indian Ocean. The western expansion of France was contemporaneous with the first

Westward, France was expanding in India. Now was her golden opportunity in North America; but many causes in no wise connected with the colonial expansion of the nation were at work to prevent her from making the best use of her opportunity.

#### FACTORS OF THE FAILURE OF FRANCE TO MAINTAIN HER COLONIES IN AMERICA AND INDIA

Like other nations of the time, France had a narrow view of the value of the economic value of colonies. To her North American possessions she preferred colonies yielding tropical produce and

and not had the priority of law as it is so often said. Another national trait worked in the same direction. Love of order, which led France to the new rules upon taxation, on the army, on literature, on social manners, restraints. There were no counterbalancing individual and republican liberties. Love of consistency determined the introduction of formal institutions, some of which have survived to this day. The people, suffering at home from them, found no incentive to go to the colonies, where they would still be under the

same restrictions. They opposed the advent of Protestants. The whole history of America would have been different and the Huguenots were doomed to settle in New France. Men men like La Roche, Boufford, Jarry, Maréchal, Le Laury, De Peyster, De Pew and the

rest of the French Republic, would have wielded their influence in a vain.

A fact of transcendental importance is determining the fortunes of

11

will not be shown, have kept aloof from those numerous continental distractions into which at times she entered on account of the

continuous war. However, the ultimate fact which shaped the fate of Canada was the mother country. The expansion of a country can go on satisfactorily only in so far as it is supported by a

XI

and the colonies of its abuses and a source. Nothing could

literary, commercial, and military. The ruin of the national finances entailed the ruin of the navy. No navy, no colonies. The result of these causes led naturally to the Treaty of Utrecht in 1713, the first important colonial collapse of France.

The reign of Louis XV did not alter for the better the working of causes which had proven so fatal. The results of the national life

1

129. Apparent had already as

in world and all its colonies for a million. Clever and was glad to give them a big round, wise American scheme, delivered

country. France is not now grateful to him for his practical, he thought was against England. No more reference to when he was seen as a few more of snow. Among other things, he expresses the very real desire wish "to see Canada at the bottom of the sea." The real Montesquieu, at least, was not. "Kings," he says, "are not dream of populating great countries by colonies. . . . The only effect of colonies is to weaken the country whence they are drawn without populating those to which they are sent." Economists insisted that no process was possible. The comparison of publicists objected to colonies because of the presence of slaves in making them. So different was the French government that, before signing an alliance with the American colonies, it made a formal recognition of its North American possessions, and in the twelfth arrangement of the *Union League* not one refers to the loss of a vast colonial empire.

Both a hindrance to the commerce of France there were no exceptions. Many Frenchmen regarded the importance of the New-World and fisheries and France, long before, by the way. Notwithstanding

privileges. This intensified in the French heart the bitterness felt

never displayed any generosity in victory and seldom any fidelity to

the world, on the French side at least, and but a slender support from London, in the wars of the Revolution and the Empire, held on through that they were struggling for a vast empire. It was even this, but apart from the power barrier. How often the Revolution

land slaves. As to Napoleon, Europe was the field. His aim was not

or Seeley, he would never have sold Louisiana to the United States.

parts of the world. The strategic position of the Indian Ocean, the

#### THE TENDENCIES OF THE NEWER EXPANSION IN AFRICA AND ASIA

French did a little abroad and cared to do not a little, yet it was the  
 second Bourbon government that inaugurated the newer expansion,  
 which was destined to better fortune. It was expansion, unlike that

alive to necessity. The Algerians, in a conflict of the seasons which they  
 had received in 1816 from Admiral Decatur, and in 1817 from Lord

the coasts of France. France resolutely took Algeria. The Crimean

another public work, an eternal and glorious barrier. Some public men

most important groups of the Polynesian islands.

During the Second Empire colonial interests did not receive the  
 however. Colonial projects were in distant lands

more not social life, but colonial aims should be  
 be not real thought. This was far from the case during the  
 empire. However the incorporation of Algeria was progress-

the enlargement of Senegal eastward and took possession of Obock,  
 near the Red Sea. New colonies, in the Pacific, and French China,  
 in Asia.

The Third Republic marks a signal advance. To some extent, it sent out poor compensations, but nevertheless compensations for

land a glar than in Vermont and 11 Alger lands in France. In France. This, however, is not of any present importance as most of the French territories can not occur in the present world of Europeans.

#### THE VITAL ESSENTIAL TO A GREAT POWER

Colonies, to many, have appeared necessary to progress, and their lack or their subordination imperious as leading to retrogression. "Colonization," says M. Paul Leroy-Beaulieu, "is for France a ques-

tion. In order not to be left out of the great powers, she must share in that of great nations.

About the shedding of much blood, France established a protectorate over Timor. Senegal became the starting point of a march westward, continued until the French flag waved over Timor, but

lost to the different European powers and Morocco

whence she had been so recently expelled by Lord Frederick. The

main consideration led France to annex the island, though her aim was only to secure a real protectorate.



to Arcah, Tonkin, and Laos. The whole Mekong Valley belongs

France on Asia as well as on African soil.

Her colonies are seventeen times larger than her own metropolitan territory. Those of Africa are thirteen times as large. Asia making

with India the possibilities.

#### THE REACTION OF COLONIZATION ON THE METROPOLIS AND THE CONTINENT

This expansion is not only the realization of a national purpose, but the birth of a new life which has become a part of the life of the world. Some have spoken of the unusual development of the navy and army, but this is only a part of a larger movement that has been

though appearances may be to the contrary, never as France has such a degree of national energy. The territorial expansion has

France has to remember the fundamental conception of unity.

This movement, as well as the development of interest in the science of geography, contributed to a vast work of exploration.

It is the great tradition, De Brazza, Liotard, Mizon, Montiel, Roger, Ponce, and Marthe, are names long to be remembered in France for their services not less to the country than to the cause of knowledge.

With topology, and ethnography, is being in return.

France is at the center of the world. Colonial routes have been established, no way known in Tibet, Madagascar, and the China. Fearless and noble history is recorded.

he it open past colonial errors. Artists are turning to new fields with encouraging results, and novelists are beginning to paint the life of the new possessions.

At the same time the *colporteurs* have been taking place in the French mind in reference to colonial life. With the telegraph and the newspaper, the French man has no longer the aversion to colonial life which he had in former days. Soldiers ask to remain in the colonies when their service is done. Many are happy in their new home beyond the sea. The *Colon Duplex* in Paris works to increase their numbers. The government with an unchanged and consistent policy, has launched a large program to civilize the different parts of French North African possessions and overseas empire. Everywhere are springing up schemes for new railroads and for the use of watercourses. The railroads of Algeria and Tunis are ex-

tended, and a new line, the *Chemins de fer de l'Algérie*, is being constructed, which would take passengers from London and Paris to Lake Téboul in less than six days. When the recent conquest of Tunis was made it was really a colonial necessity. The gradual advance of French northward has changed all the circumstances previously obtained concerning Africa. So, too, there has been proposed an ex-

posed line, the *Chemins de fer de l'Afrique du Nord*, which would take passengers from the same city. This view is not widely entertained, but it is

Let us now consider the positive, permanent results of French con-

After 137 years of British rule, it is still French and unassimilated, by its own people. In fact, the reverse in some places is true. There

be the by-product who do not speak English. The French constitute an important factor in the development of Canada. Their bi-lingualism gives them a great advantage. There are, of course, but a few high places in literature, some are prominent in the judiciary

of Canada, but none of an international, is still very strong. The French sympathies. It may be said that if the French of Madagascar remain

THE GEOGRAPHIC RELAT OF  
FRANCE  
AND HER  
AFRICAN COLONIES



notwithstanding English institutions, those of Bourbon seem to have been maintained by the times and life of contemporary France.

Madagascar, St. Pierre and Miquelon near Newfoundland, generally known as St. Pierre, are serving an important national purpose. They are the center of territories so extensive that at least 400,000 people in France and in St. Pierre depend upon them. They are also

nothing as to French colonial activity.

#### FRENCH COLONIES IN ASIA,

included by the American Government in an equal. The most promising

developed

which ranking mistakes of policy and of judgment, France has

with the Chinese who have settled in India with the advantage of India and.

#### IN AFRICA, THE SAHARA, AND THE

Africa seems to be the great sphere of French activity. On the east coast of Africa close to the southern entrance of the Red Sea

this territory is said to contain much coal.

Madagascar is one of the most popular colonies. The work of France here has been both destructive and constructive. She has overthrown the despotic Oriental government of the Hovas. The influence which followed was not so much the result of French con-

quest, in a most complete manner restored order. The island is

Hova government. The French are happy to have their own tribes, but they are to be destroyed from the French Hova government, and by

the works. She has built roads from the center to the coast on all sides of the island, which previously was very poor. Now French

ships of goods from the coast to Antananarivo for capital. The

by France extend in many directions. An extensive agricultural development is taking place, and a new life has appeared for that interesting island.

who territory is as yet but very imperfectly organized. The French

future of the continent of Africa, some positive results, which cannot be approved by all, are already visible.

First, there has been an overthrow of the cruel African despots.

from which they have been driven— wars or slave trade; fourth, the rapid fading of roads— one, 600 miles long, from Tananariva to the Congo, and another of 600 miles from the coast of an area

the remarkable Lévy, an only traveler and scientist, has testified to

west— where the Senegal-Niger sea coast is flung out and the French of it spring it— in dense territories.

France is one of the great powers of the world. The following facts concerning the work of France there are illustrative. First, she has introduced a society of life never known before

of justice, 1891, she has given a grant for public education, in 1891

eighty-two railroads of railroad have been built. Roads have been constructed upon a large scale. In fact this has been one country

and Tunis. With the recent stipulations developed of the automobile and its introduction into the colonies, the building of these roads is of the greatest significance. Algeria is the most important achievement of France because of its internal development of the colony and its economic relations with metropolitan France. Algeria is the former stronghold of African power, has become an important colony, and Algeria as safe as France. Though colonization is difficult

to the colony is no less than 75,000 Europeans. In 1900 France

advantage of resources who has not had shut of rich resources, which are a demographic magnet. I have no doubt to confidence not only in the power of Frenchmen to make the natives accept the presence, regardless of the will of Africa, but in the ultimate readiness to accept both races. France has a long shown her power to win to her colonies of nations and forces. The Navarrese is not to France

ethnographically Germanic, longs to return to France. Corsica, though Italian, is attached to her traffic companies. Savoy, after some 40 years of union, displays an unprejudiced loyalty. In every French colony one sees signs of the growing attachment of the



respect from the other of races, can the French make any.

For a long time Alger has had as its governor the distinguished general Lecomte who now represents France so well in the United States.

Alger is a man of a very high character. He has helped not to secure the best advantages from the juxtaposition of two forms of society and two civilizations, with the possibility of aspirating to

#### PHYSICAL ASPECTS OF FRENCH COLONIZATION

It is an extraordinary fact that at such a convergent situation of foreign peoples, who, like all such aggregations, are impatient at any obstacle to their growth, the natives of Algeria should have kept to

with a really perfect faith. They are ruled by Muslim law and by their own judges and they form homogeneous communities. They are

extremely alien to the French. The parts which are pre-

sented to France. It is her policy to give her colonies the same

and her country. Catholics, Protestants, Jews, and Muslims in

France has been extended more efficient communication has been

schools have been established. Young women have a *lycée*—*Collège*, and a full course of secondary education are organized for the first

The economic situation is steadily improving. The railroads

at present being the representative point. Rich deposits of phosphates

may prove to be the gold mines of North Africa.

Algeria and Tunis not only furnish their own food and that of the French garrisons, but have also a large export surplus. In a

THE COL. VINT. FURN. & ANTIQ. OP. EST. & ART.

the neighborhood and of Algiers is the winter garden of  
with games, produce, which is distributed through France. More  
and more a twofold current of goods flows from France to  
France with Africa. French civilization moves southward with the  
performances with the same consequences of such movements, in  
also with blessings unpeakable for the natives. It is not necessary

of America." The late Gen. A. A. has expressed the desire that in the

It is not yet definitely determined to extend over Morocco.

The natives under French care, as a whole, suffered less from their  
I  
powers. Were Parkman able among us, he might repeat, now and then

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

Health expansion should not be judged by aggregate results

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

[illegible]

1994-1995

Prasad), themselves, but it is also working for international chieft-

are "brightest in the darkest."

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former "Weather King" formerly the King was from a line

he said could be greatly improved. His machine was constructed

The funnel is made of green cotton 2 millimeters thick and 1 cm.

These firing stations were established:

to the wine-growing districts in the vicinity of Serris. Here also the

stems sprang up, each with its individual station. In the summer

that a colleague was subpoenaed and that November 6-8, 1964 in

represented by the chief secretary of state, and the chief series of war and the chief ministerial delegates. These four were the participants in the

fourth series of congresses, representing Syria, Poland and Venice, were appointed to report on the results of the survey period for pre-

"if the survey was continued, in the time the survey from the land was always avoided." A number of instances were cited as well as in the towns where there was no standing for the survey. The survey was not made in the districts where the survey was done in the land.

The survey was not made, however, particularly with the public successful results obtained by the process. There is not yet the certainty of its effectiveness.

If had been ignored by "weather or firing." I confess that I am not

the process we have not the right to deny its existence. In explaining the action of the eruption, two points are to be established. The effect of the eruption is the force of the vortex ring that rises from the gun barrel. In the survey, determining the process of the eruption is a natural necessity to make a survey, and as good a base as possible. The fact is that from the survey in the before the

by the right what he began his experiments. "The observation," he says, "that every eruption is preceded by an abso-

lution of land and therefore I tried 'weather shot up,' which has been known for centuries."

at the conclusion

of the vortex ring from the cannon prevents the formation of hail-  
stones. Mr. Stager has from the beginning described the phenomenon  
which he has taken up to the effects of the vortex ring  
in his report. For an expert from the Imperial Institute, who  
went to investigate the experiments made by Mr. Stager in 1897, the

when a vortex ring is shot out from a cannon a smoke ring is produced

which lasted for about 10 seconds, and it  
was for more than 10 seconds.

A swallow which was once struck by one of these vortex rings fell

the whole of the vortex ring. Step by step the size of the vortex

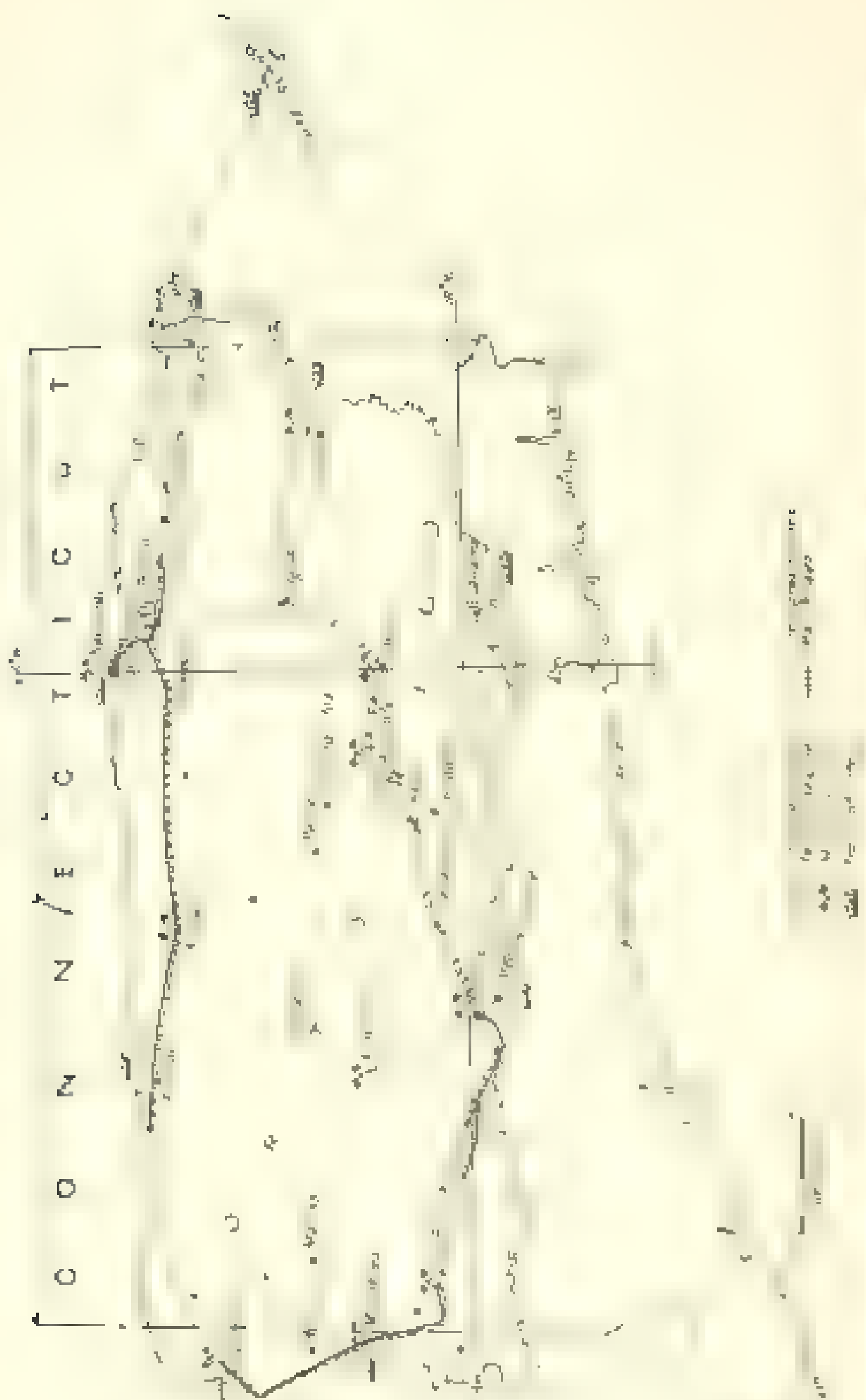
ring, but a most effective combination has been obtained. In some  
cases the clouds are like a shot from a gun barrel, and a distance  
of about 1000 to 2000 feet.

were formed with heavy linen cloth, first through paper targets in  
a distance of about 1000 to 2000 feet.

was pointed out over the whole of the field for further observation.

In the recognition power of the vortex ring we have found the force  
which may possibly influence the process of hail formation. Un-  
fortunately, as I have mentioned before, we know too little of the

report of about 1500 to 2000 feet.



## THE U. S. SIGNAL CORPS IN PORTO RICO.

Through the courtesy of General A. W. Greely, Chief Signal Officer, U. S. Army, the NATIONAL GEOGRAPHIC MAGAZINE is enabled to publish the accompanying outline map of Porto Rico, prepared by Major A. H. S. \_\_\_\_\_.

Signal Corps of the Army

## RUSSIAN RAILWAYS

The phenomenal growth of Russia as industrial and trading power in the last ten years is in large measure due to the great reorganization and total extension of her railway lines. In 1880 the government was compelled yearly to meet a heavy loss on its rail-

road system. Since that time, however, when the government has been purchased, agreements have been made with a few large companies, and new lines have been constructed by the government itself. As a result 60 per cent of Russian railways are now entirely in the hands of the state, and instead of suffering a heavy deficit, it is a surplus. During 1896, 71,000,000 passengers were carried on Russian rails which with only a few gaps, run from the White to the Black Sea, and from the Baltic to the Yellow Sea. The rates of fare are as low as those of England and the world.

Dr. H. S. FORTMYER, who will assume the presidency of the

Department of the Coast and Geodetic Survey by Mr. H. S. Fortmyer. No man in the United States is better qualified for the experience and ability than Mr. Fortmyer to be the head of this important scientific bureau. He entered the service in 1867, when a boy of seventeen, and has gradually worked his way from the lowest to the highest grade.

## THE REVOLT OF THE ASHANTIS

During the last week of April the Ashantis in great numbers invaded Accra, and there attacked the fort. Though they were repulsed with severe loss, they renewed the attack several times during June, and a general state of insurrection now prevails in the country.

Until 1848 Ashanti was a powerful confederation of tribes which succeeded by conquest to possess the whole of the coast of the Gulf of Guinea, and though their capital was destroyed and the kingdom was reduced to a few miles, and its independence became weakened by the occupation of a small part of its territory, a permanent British garrison was stationed in Accra, and the British came to feel as if the English sphere of influence in Africa would be secure in consequence of an oval shape, not surrounded by an irregular swamp. The population probably does not exceed 20,000, of whom not more than 25 are Europeans. It is stated that the garrison of the fort, numbering 68, consisted only 18 Europeans, the rest being drawn from the Fanti tribes along the coast and from the interior, who have been raised from the Niger northwards of the interior.



Reinforcements march the way from Sierra Leone and Lagos, but from the fort an escort is sent to the interior, and the Ashantis are repulsed. The population of the Ashanti is not more than 20,000, and is divided into 12 tribes. The Ashantis are a very brave and warlike people, and are very powerful.

The Ashantis are a very brave and warlike people, and are very powerful. They are a very brave and warlike people, and are very powerful. They are a very brave and warlike people, and are very powerful.

Ashanti is famous for its gold and goldsmiths, and for the many slaves of the Ashantis. The Ashantis have been very busy in the war, and for the many slaves of the Ashantis.



## BIBLIOGRAPHIC MISCELLANEA

A second meeting, the ringers' convention of 1911, 28. June, 1911, took place in the National Museum for the purpose of electing a new committee for the next year. The House, as well as the Senate, were again composed of twenty members, consisting of Martin Luther, George Andrew H. Allen, Otis T. Mason, H. C. Kiefer, A. D. De Haven, Harry K. and Mrs. J. George L. Cook, A. Von Herten, H. F. Brown and Joseph L. Cook.

This development of interest in the forest in the north was also seen in and near the district of interest of my party, viz. in the Weather Bureau station established at Littleton, near the present boundary of the West and Illinois zones. This station moved on September 11, 1903, to its new headquarters at Vernon on the western side of the park, as located by Prof. A. J. Honey and Mr. Norman B. Cooper, of Chicago, Ill.

But, in fact, to conduct history to design wetlands, bridges, to Indian and through use of the Mississippi River are being determined. The work is in the hands of the Mississippi River Commission, the home of army and civilian engineers, aged with a fine sense of navigation, the vast wilderness. In years of experience and more or less skilled effort at a permanent base, a school of permanent good as strong, the commission has widely decided to survey the water system and to bring water over the foot of an entire.

[illegible]

The price that can be brought by the consumer when personally doing the shopping and especially the farmer, for that is the purpose of the act, is, owing to the efforts of the U. S. Western Division, being steadily and increasingly reduced and it would be well at this time to let the farmer know that the farmer can, if he is a Western farmer, get rid of his surplus wheat only for the cash. The most serious of these situations is to be at Dulles, Md., at an extensive and busy market for potatoes, where the U. S. Division is now engaged in putting in the necessary equipment.

the management by the U. S. Navy failed miserably in saving elements of the fleet and to participate in it. Later on one of the ships has played with me to let it clear and I to the Landing Force for a straight thing that it is extremely easy. A friend was refused to permit it to only vessel to go in between that it is going to be a great tragedy, a bit a few more miles down from the mainland. There is no way out of this except the influence, was a thousand that I only put the ship on one side and were sure of it and not to let it a bit more or less, a better to be other remain tied to their wheel and have sent sent back to base and by the way for the capture.



ORIGINATOR: WISCONSIN

[illegible]

When a person is appointed to a position of trust and responsibility, it is essential that they are qualified to perform the duties of the position. This is particularly true in the case of a person who is appointed to a position of trust and responsibility in the public sector. The person must be qualified to perform the duties of the position, and must be able to perform the duties of the position in a manner that is consistent with the public interest.

[illegible]



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# CHESAPEAKE & OHIO RY.

The first part of the paper discusses the importance of the
 *Journal of Management Education* in the field of management
 education. It highlights the journal's role in providing
 a platform for the dissemination of research findings and
 the advancement of the discipline. The second part of the
 paper focuses on the journal's commitment to diversity and
 inclusion, emphasizing the need for a more equitable and
 representative body of research. Finally, the paper concludes
 with a call to action for the management education
 community to continue to support and engage with the
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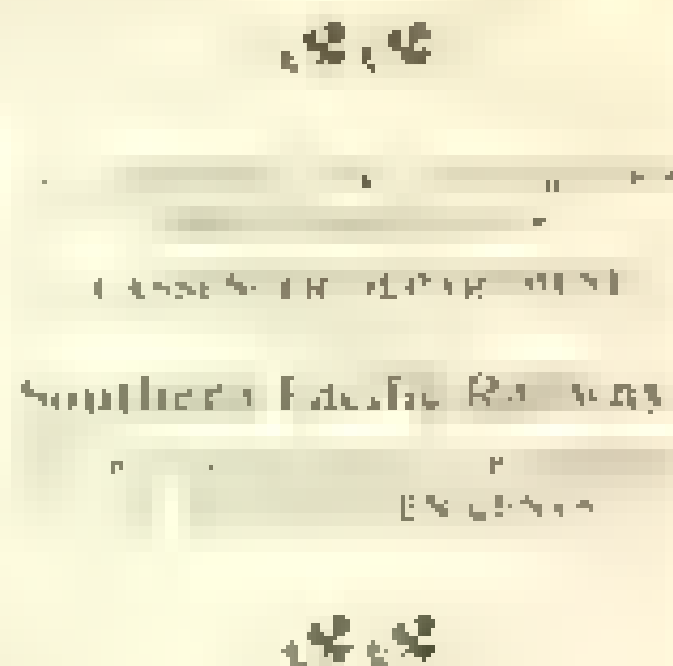
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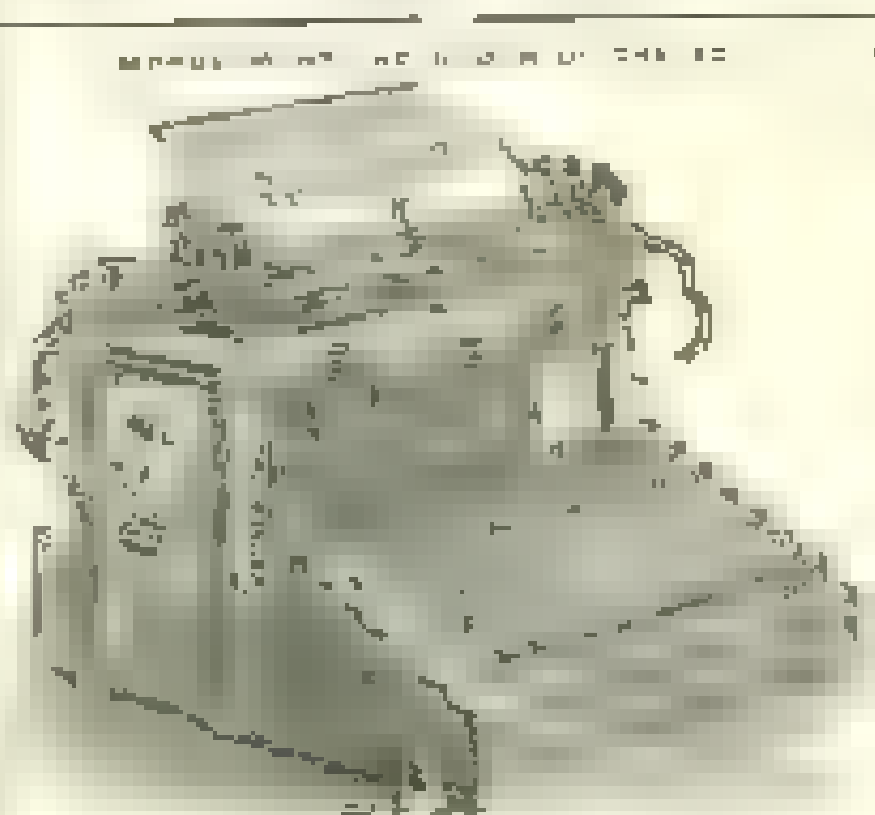
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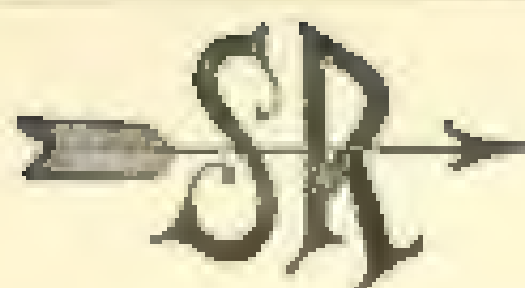
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